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**AMENDMENTS TO THE SPECIFICATION WITH MARKINGS TO SHOW
CHANGES MADE**

Replace the Abstract as follows:

-- ABSTRACT OF THE DISCLOSURE

A blood pump having a pump housing and an impeller disposed in the housing and driven by an electric drive includes at least two connection devices directly disposed at the housing for connection to an artery outside the heart such as for example a suture ring or a vascular prosthesis and configured in such a manner to realize a direct connection of the artery to the pump housing, and wherein a pump conduit can be implanted into the aorta ascendens for relieving the left ventricle and in the truncus pulmonalis or into the pulmonalis furcation for relieving relieving the right cardiac ventricle and other blood vessels for improving the blood circulation or elevating the pressure in a certain vascular section.-- ;

Replace the following paragraphs:

-[0014] Threat of infection poses another risk due to the rather large plastic surfaces presented by tubing, which provides a breading breeding ground for bacteria.--;

-[0048] In FIG. 3 another embodiment of a blood pump 30 provided with a variant of the pump conduit 31 and is particularly suited for a very short *truncus pulmonalis* for support of the right cardiac ventricle. In this type of

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configuration, the pump conduit 31 has a Y-shape. A suture ring 32 is disposed at the inflow side, which is sutured to the stem of the pulmonary artery 33 directly behind the pulmonary valve 34. On the outflow side, the right and the left pulmonary artery arteries 35 respectively 36 are directly connected to the out-flow connecting piece 39, 40 of the pump conduit 31 by means of suture rings 37, 38. The connecting pieces 39, 40 preferably lead, in correspondence to the rotational direction of the pump 30 in eccentric manner into the pump housing 41. The attachment of the motor drive in the pump housing 41, and the power supply which is not shown here can for example be carried out centrally at location 43. The webs 13, 14 that are configured as vanes as shown in FIG. 1, are not necessary in this embodiment of the blood pump 30.--;

--[0049] A similarly constructed pump conduit, which is not shown here has an angle adapted to the anatomical conditions between connecting piece and the pump housing and is likewise suited for implantation at the aortic furcation to both pelvic arteries for support of the blood flow in arterial occlusionary disease in the pelvic and leg area in a situation when reconstructive vascular surgical procedures alone are not sufficiently successful.--;

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**AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES
MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS**

1. (Cancelled);
2. (Currently amended) The blood pump of claim 4 21, wherein the tubeless connection devices are of the type selected from the group consisting at least one of a suture ring and a vascular prosthesis.
3. (Cancelled);
4. (Currently amended) The blood pump of claim 4 21, wherein the a length of the pump housing is less less than twice that of its diameter.
5. (Original) The blood pump of claim 4, wherein the length is less than 1.5 times the diameter of the housing.
6. (Currently amended) The blood pump of claim 4 21, wherein the a length of each of the vascular connection devices is shorter than the a diameter of the pump housing.

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7. (Cancelled);

8. (Currently amended) The blood pump of claim 8 21, wherein the webs are configured as vanes.

9. (Cancelled);

10. (Currently amended) The blood pump of claim 7 21, wherein the webs are configured for housing metal cables or metal pins for transmission of electric current.

11. (Currently amended) The blood pump of claim 7 21, wherein an area bordered by the motor and the casing, is a flow area with a diameter which is 50% 80% of a free flow area at one end of the pump housing.

12. (Currently amended) The blood pump of claim 11, wherein the diameter of the free flow area is 50 % at least 80% of the free flow diameter at the one end of the pump housing.

13. (Currently amended) The blood pump of claim 3 21, further comprising wherein the pump is provided with two a second pump housing with impeller and two motors a motor.

14. (Currently amended) The blood pump of claim 14 13, further comprising an

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adaptable connection device between the two pump housings.

15. (Currently amended) The blood pump of claim 14, wherein the impellers are configured for being ~~can be~~ driven in ~~an~~ opposite direction to each other for impelling blood.

16. (Currently amended) The blood pump of claim 3 21, further comprising an auxiliary motor disposed ~~at~~ in the housing, said auxiliary motor provided with a mass driven in opposite direction to the impeller.

17. (Currently amended) The blood pump of claim 3 21, wherein the housing is provided with an attachment device for attachment of the pump to tissue.

18. (Original) The blood pump of claim 17, wherein the attachment device is configured for attachment to a rib cage.

19. (Currently amended) A method for a tubeless vascular implant of a blood pump with an impeller according to claim 21 comprising: the steps of providing a blood pump with connection devices, preparing vascular tissue for the implant, inserting the pump into location and connecting the pump directly to the vascular tissue with a connecting device selected from the group consisting of suture rings and vascular prosthesis.

20. (Original) The method of claim 19, wherein the pump connection devices

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are sutured to the vascular tissue.

21. (New) A blood pump having an impeller comprising:

- a pump housing with the impeller disposed therein,
- a motor disposed within the housing for driving the impeller,
- webs connected to a casing of the housing and to the motor for firmly holding the motor within the housing, wherein the housing is provided with at least two vascular connection devices for a tubeless connection of the pump to a blood vessel outside a heart.

22. (New) The blood pump of claim 21, wherein the motor is an encapsulated motor.

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REMARKS

The last Office Action of July 1, 2005 has been carefully considered. Reconsideration of the instant application in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 1-20 are pending in the application. Claims 2, 4, 6, 8 and 10-19 have been amended. Claims 1, 3, 7, and 9 have been cancelled. Claims 21 and 22 have been added. A total of 18 claims is now on file. No claim surcharge is due.

Amendment to the specification were made to correct typographical errors as pointed out by the Examiner.

It is further noted that claims 8, 11, 12, 14 and 15 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-6, 14, 15 and 17-20 stand rejected under 35 U.S.C. §102(b) as being clearly anticipated by U.S. Pat. No. 4,688,998 to Olsen.

Claims 1-3, 8, 13-15, 17, 19 and 20 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Pat. No. 4,957,504 to Chardack.

Claims 6 and 18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Chardack.

Claims 1-3 and 6-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 6,088,588 to Goldowsky.

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OBJECTION TO THE SPECIFICATION

The Examiner required correction of certain typographical errors in the specification and the Abstract. In response thereto, Applicant has eliminated these errors by replacement of the relevant paragraphs. These corrections are self-explanatory and no further discussion thereof is needed.

REJECTION OF CLAIMS 8, 11, 12, 14 AND 15 UNDER 35 U.S.C. §112, SECOND PARAGRAPH

Applicant has amended claims 8, 11, 12, 14 and 15 to address the §112 rejection. These changes are self-explanatory and cosmetic in nature and should not be considered as a narrowing amendment to trigger prosecution history estoppel.

REJECTION OF CLAIMS 1-3, 8, 13-15, 17, 19 AND 20 UNDER 35 U.S.C. §102(b) AS BEING ANTICIPATED BY CHARDACK

The rejection under 35 U.S.C. 102(b) is respectfully traversed.

In order to clearly distinguish the present invention from Chardack, applicant has drafted new claims 21 and 22 setting forth the interior disposal of the motor within the housing of the pump and its attachment by webs to the housing wall.

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It is believed that independent claim 21 patentably distinguishes over the Chardack reference, since Chardack does not show an interior motor attached to the pump housing wall by means of webs.

Claims 2, 4, 6, 8, 10, 11, 13-14 and 16- 19 were amended to make them dependent on new claim 21. as such, these claims are likewise patentably distinguished over the Chardack reference. Additional amendments to these claims are merely cosmetic in nature and do not trigger prosecution history estoppel. Claims 11 and 12 have been amended to eliminate the Examiner's objections, such that claim 11 now recites the flow area of 80% and claim 12 the narrower flow area of 50%. These amendments were also merely cosmetic in nature.

It is believed that the amendments to the claims render the claims patentable.

Accordingly, it is applicants' contention that the rejection under 35 U.S.C. §102(a) as being anticipated by Chardack has now been overcome.

Withdrawal of the rejection of claims 1-3, 8, 13-15, 17, 19 and 20 under 35 U.S.C. §102(b) is thus respectfully requested.

REJECTION OF CLAIMS 1-6, 14, 15 AND 17-20 UNDER 35 U.S.C. §102(b) AS BEING ANTICIPATED BY OLSEN

The Olson reference likewise does not show the features of claim 21, that is of, an interiorly disposed motor within the pump housing connected to the pump housing walls by webs.

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The dependent claims which contain all the elements of claims 21 likewise distinguish over the Olsen reference.

Accordingly, it is applicant's contention that the rejection under 35 U.S.C. §102(a) as being clearly anticipated by Olsen has now been overcome.

Withdrawal of the rejection of claims 1-6, 14, 15 and 17-20 under 35 U.S.C. §102(b) is thus respectfully requested.

REJECTION OF CLAIMS 6 AND 18 UNDER 35 U.S.C. §103(a) AS BEING UNPATENTABLE OVER CHARDACK

The Examiner has now rejected the original claims as unpatentable over Chardack.

In order to clearly set forth the features of the present invention, applicant has canceled original claim 1 in favor of claim 21. Claim 21 includes the interior disposal of the motor within the housing and its attachment to the housing by webs. Since claims 6 and 18 depend from claim 21 either directly or indirectly they contain all limitations of the independent claim 21. Since Chardack does not show a motor disposed inside the housing and attached by means of webs to the wall of the housing as in claim 21, the additional limitations in claims 6 and 18 distinguish over the Chardack reference in the same manner as claim 21.

For the reasons set forth above, it is applicant's contention that Chardack does not teach or suggest the features of the present invention, as recited in claims 6 and 18.

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Chardack shows a screw-like structure which acts as a rotor. Annular electromagnets are sequentially activating peripheral magnets in the rotor blades which cause the rotor to rotate. This is very different from the present invention as claimed in claim 21, wherein a motor is disposed in inside the housing and held firmly by means of webs that are attached to the casing of the housing.

Furthermore, the Examiner sees the Chardack reference as rendering obvious that the pump can be attached to the rib cage of a person. However, Chardack does not show that and the Chardack device is shown in Fig. 4 as being attached via multiple tubing to the heart. In contrast, the presently claimed invention, because of its configuration is for a tubeless connection.

Withdrawal of the rejection of claims 6 and 18 under 35 U.S.C. §103(a) and allowance thereof are thus respectfully requested.

REJECTION OF CLAIMS 1-3 AND 6-20 UNDER 35 U.S.C. §103(a) AS BEING UNPATENTABLE OVER GOLDOWSKY

The Examiner's rejection based on Goldowsky is respectfully traversed. He notes that a motor could have been within or along the impeller shaft. However, there is no explanation how such an arrangement would work since Goldowsky specifically chooses to set the motor exteriorly of the flow area as clearly seen. The Examiner has provided no motivation to have another arrangement working with the Goldowsky structure. Interiorly in the Goldowsky pump is a piston and the motion of the piston is through the magnetic rings and drive coils from the outside to oscillate the piston. This arrangement is totally

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different in structure and function than the presently claimed pump. Nothing in Goldowsky renders the pump of claim 21 obvious.

Accordingly, it is applicant's contention that the rejection under 35 U.S.C. §103(b) as being obvious over Goldowsky has been overcome by the above comments.

Withdrawal of the rejection of claims 6 and 18 under 35 U.S.C. §103(a) and allowance thereof are thus respectfully requested.

CITED REFERENCES

The reference to Kazatchov which was listed in PTO-892 was not cited as a basis for any rejection, therefore, no discussion thereof is necessary.

CONCLUSION

Applicant believes that when reconsidering the claims in the light of the above comments, the Examiner will agree that the invention is in no way properly met or anticipated or even suggested by any of the references however they are considered.

None of the references discloses a blood pump with the interior motor and its attachment to the pump housing.

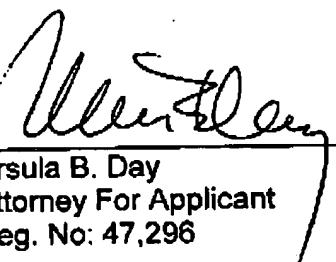
In view of the above presented remarks and amendments, it is respectfully submitted that all claims on file should be considered patentably differentiated over the art and should be allowed.

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Reconsideration and allowance of the present application are respectfully requested.

Should the Examiner consider necessary or desirable any formal changes anywhere in the specification, claims and/or drawing, then it is respectfully requested that such changes be made by Examiner's Amendment, if the Examiner feels this would facilitate passage of the case to issuance. If the Examiner feels that it might be helpful in advancing this case by calling the undersigned, applicant would greatly appreciate such a telephone interview.

Respectfully submitted,

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